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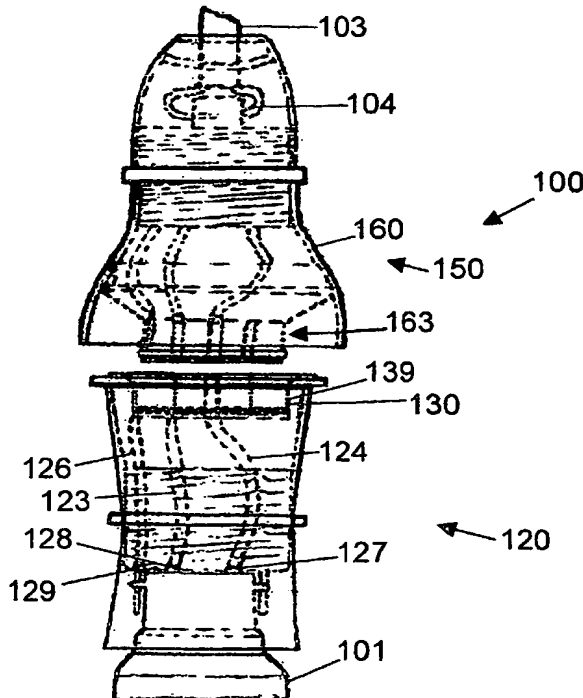
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- Published: — with international search report

[Continued on next page]

(54) Title: CONNECTOR



(57) Abstract: An electrical connector (100) comprising a male (120) and female (150) part, each part (120, 150) having a magnet (135, 165) adapted to attract the parts (120, 150) together to make a connection. The parts (120, 150) can connect at any relative rotational orientation and preferred embodiments prevent offset connection between the magnets (135, 165) or parts (120, 150). The connector (100) is particularly suited for use in out of reach locations, for example to easily and safely replace light bulbs into sockets suspended from a ceiling.

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

PCT/GB 03/03080

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01R13/62 H01R24/02 H01R33/20

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01R H01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 638 907 A (DALMAU RAYMOND ;TILHOS JEAN MARIE (FR)) 11 May 1990 (1990-05-11)  abstract page 1 -page 3 figures 1-6	1-5, 8-11, 15, 29-33, 35, 41
Y	---	22, 23
	-/-	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the International filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the International filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*Z\* document member of the same patent family

Date of the actual completion of the International search

6 October 2003

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## INTERNATIONAL SEARCH REPORT

PCT/GB 03/03080

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 625 847 A (DALMAU RAYMOND) 13 July 1989 (1989-07-13)  abstract page 5, line 26 -page 7, line 28 page 9, line 6 -page 11, line 11 figures 1,2,9-12 ---	1-5, 8-11,13, 15,24, 25, 29-32, 35,36
X	FR 2 808 624 A (HONNORAT DE MALLIARD GHISLAIN) 9 November 2001 (2001-11-09)  abstract page 1 figures 3-5 ---	1-3,9, 10,24, 25,29-35
X	US 5 401 175 A (GUIMOND RONALD ET AL) 28 March 1995 (1995-03-28)  abstract column 2, line 16 -column 3, line 31 figures 1-8 ---	1-4, 7-12, 24-28, 30-37,41
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Y	GB 2 162 701 A (TYTAN LTD) 5 February 1986 (1986-02-05) page 1, line 19 - line 63 ---	22
Y	US 6 283 767 B1 (SORNES ESPEN) 4 September 2001 (2001-09-04) abstract column 3, line 1 - line 2 column 4, line 19 - line 23 -----	23

# INTERNATIONAL SEARCH REPORT

PCT/GB 03/03080

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1,3,9,22-25,30-32

Magnetic portions provided in each of male and female part of an electrical connector

2. Claims: 13-21,34-39

Terminals for an electrical connector

3. Claims: 2,4,8,10-12,33,41

Guiding means for an electrical connector

4. Claims: 7,40

Protective means for an electrical connector

5. Claims: 26-28

Means to allow the removal parts of an electrical connector

6. Claims: 5,6,29

Attaching parts for an electrical connector

## INTERNATIONAL SEARCH REPORT

PCT/GB 03/03080

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